

ABSTRACT TO OBOGS STUDY

Fire Protection : Thursday, October 25th 3:30pm – 5:00 pm

The purpose of the on-going study ordered by the DGAC (Direction Générale de l'Aviation Civile) to AIR LIQUIDE and AIRBUS Industrie is to combine the skills of an on board gas generating systems supplier and an aircraft manufacturer so as to investigate the main issues related to the installation of on board oxygen generating (OBOG) and on board inert gas generating (OBIGG) systems in commercial aircraft.

Such systems now represent a very attractive solution to improve the level of safety of the commercial fleet. The following scenarii are considered :

- ?? Reduction of the threat related to flammable vapors in fuel tanks,
- ?? Suppression of fires in cargo compartments,
- ?? Supply of oxygen to passengers and crew members in case of cabin decompression.

Issues related to On Board Inert Gas Generating Systems (OBIGGS) have been intensively covered by other working groups. Hence, special emphasis is placed on On Board Oxygen Generating System (OBOGS) that not only improve the aircraft fire safety by reducing the amount of stored oxygen but also increase the aircraft operating performance and route flexibility.

The study is divided into three main parts :

- ?? Description of the state-of-the-art of gas separation technologies for aircraft applications.
- ?? Description of system physical characteristics (mass, size and consumption) and comparison with available energy sources on board the aircraft.
- ?? Certification issues related to the integration and use of on board gas generating systems for commercial aircraft.